

**COMSATS UNIVERSITY ISLAMABAD, ATTOCK CAMPUS**

**COMPILER CONSTRUCTION**

**LAB TERMINAL**

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**Q1: Explain 2 core functions of your mini compiler.**

**Lexical Analyzer:**

**Function**: It processes the info source code and breaks it into tokens (e.g., watchwords, administrators, factors). It performs design matching utilizing ordinary articulations to distinguish and order the tokens.

**Model:** In the event that the info is int x = 10;, the lexical analyzer would create tokens, for example, int, x, =, 10, and ;.

**Syntax Analyzer (Parser):**

**Function:** It examines the symbolic arrangement created by the lexical analyzer as per the syntax of the programming language. The parser fabricates a grammar tree or unique linguistic structure tree (AST) in view of the standards of the language.

**Model:** For an articulation like a + b, it makes a tree with + as the root and a and b as leaves.